INVESTING IN TOMORROW'S JOBS:
EFFECTIVE INVESTMENT AND ECONOMIC RENEWAL

MEETING ONTARIO'S PRIORITIES

SUPPLEMENTARY PAPER
1992 ONTARIO BUDGET

INVESTING IN TOMORROW'S JOBS:

EFFECTIVE INVESTMENT AND

ECONOMIC RENEWAL

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Investing In Tomorrow's Jobs:
Effective Investment & Economic Renewal

Preface

Over the past year, I have talked to many Ontarians about the future of our economy. Everyone knows that this recession has hurt more than any other recession since the 1930s. So it is only natural that many of us are asking not only "When will the economy recover?", but also "What kind of economy can we hope for in the future?"

I think the answers to both of these questions will depend in large measure on what we do in government, in business and on the job. In the short term, economic recovery depends on today's investment decisions. We need to reinvest wisely in the machinery, infrastructure and ideas that create demand and jobs today.

At the same time, we must recognize that the investments we make today will determine our economic well-being tomorrow. "Investing In Tomorrow's Jobs" connects what businesses, workers and governments are doing now, as we move out of the recession, to a vision of what our economy could be in the future – if we have the determination to get there.

I truly believe that we are in a period of fundamental change where our goals and actions will make a difference. This is a time of tremendous economic change around the world. A new economic reality is emerging – one that challenges us to find new ways of becoming more productive. Ontario's workers and managers have proven their adaptability in the past. I am confident we will do so again.

One reason I'm confident is that there is a remarkable consensus regarding the fact that the sources of economic success have changed. Organizations as diverse as the Ontario Premier's Council, the Business Council on National Issues, and the United Steelworkers have all concluded that we must direct our efforts and resources to increasing productivity growth and promoting innovation.

There is now widespread agreement that reliance on unskilled and low-paid labour, rigid and hierarchical organization and unrefined natural resources will not provide the foundation for future economic well-being. Simply put, our past strengths in manufacturing, service industries and natural resources must be renewed and redesigned to meet the test of an innovation-based economy.

Our challenge, across the economy, is to increase innovation, flexibility and productivity growth by making tangible investments in the people,

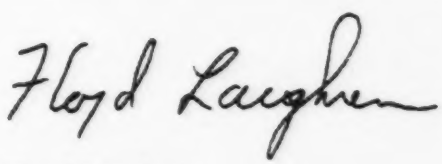
machines, infrastructures and systems that bring them together. That is what this paper is about.

"Investing in Tomorrow's Jobs" picks up where last year's Budget paper "Ontario in the 1990s: Promoting Equitable Structural Change" left off. A year ago we pointed out that "sustainable prosperity in the 1990s can only be achieved if we take into account the growing interdependence of technological, economic and social change." Consequently, this year's Budget targets the jobs, training and investment needed for an innovation-based economy.

As we look to the future, "Investing in Tomorrow's Jobs" identifies major influences on investment decision-making by the private and public sectors, with the goal of setting new priorities. The framework presented in this paper is intended to help this Government to redirect its spending, taxing and regulatory activity in ways that foster productivity growth and innovation.

We will only be able to achieve the goal of setting new priorities and reallocating resources if there is direct involvement by business, labour and communities.

I invite you to comment on this framework and take part in its implementation.* I know that the Ontario economy will regain its strength, but I also know that it will not be easy. Economic renewal will require leadership and a willingness to work together for change.



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Introduction

The nearly five million people who work and run businesses in Ontario generate the wealth that makes possible one of the highest standards of living in the world. Investments in productive manufacturing, the skills and energy of Ontario workers and managers and a sophisticated service sector have all helped to build Ontario's prosperity. Ontarians have used this strong base to create a healthy marketplace and one of the best health, education and social service systems in the world.

Ontario's economic security, however, can never be taken for granted. Over the past two years, the province has endured the most severe recession since the 1930s. The economy is beginning to recover from this cyclical downturn, which has been costly in terms of job losses and business closures. But Ontario is emerging from the recession into a new economic reality. Dramatic innovations in information technology, combined with the emergence of new competitors and lower barriers to international trade, are fundamentally changing the way the economy functions.

This structural economic change – in the mix of goods and services that the economy produces and the way these are produced – represents an ongoing challenge for Ontario. Ontario must use its existing strengths to build new competitive advantages. These existing strengths are considerable – a well-educated and highly motivated workforce, a core of successful international firms, high quality infrastructure, a well-developed financial sector, natural resources and a public service system that promotes social stability and a sense of individual security. Moreover, this province's workers and managers have demonstrated their ability to respond to changing conditions in the past, and they will do so again.

There is considerable agreement on the nature and direction of economic change. The Business Council on National Issues,[1] Ontario's Premier's Council,[2] the United Steelworkers of America[3] and others recognize that productivity growth is essential to economic and social development.[4] Productivity growth requires a shift from low-skill mass production to

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1 Michael Porter and the Monitor Company, *Canada at the Crossroads: The Reality of a New Competitive Environment*, study prepared for Business Council on National Issues, Ottawa, 1991.

2 Premier's Council, *Competing in the New Global Economy*, 1988, and *People and Skills in the New Global Economy*, 1990.

3 United Steelworkers of America, *Empowering Workers in the Global Economy*, Toronto, 1991.

4 Productivity is a measure of the total output from a given input or set of inputs. Productivity growth means either producing more from less or better value from the same level of effort. See discussion of total factor and labour productivity in *Ontario in the 1990s*, 1991 Ontario Budget.

Structural Change in Ontario

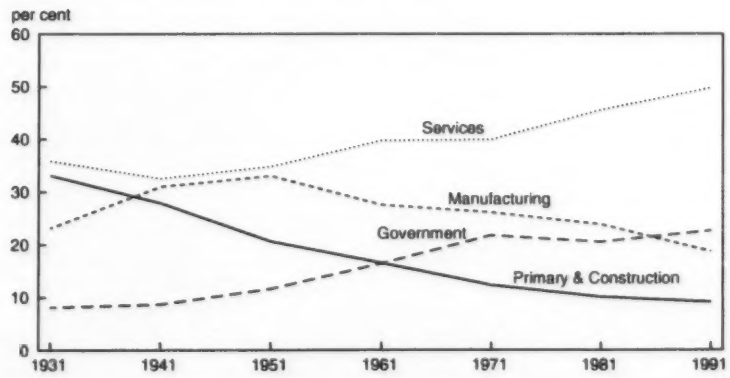
Change is not new to the Ontario economy. Ontario has evolved from a resource-based economy at the turn of the century to an economy producing manufactured goods for a protected Canadian market at mid-century to a competitive producer of goods and services for the North American market in the 1980s. The province's economy has demonstrated an ability to respond positively to changes in both world trading systems and technology. In each case, Ontario has built new competitive advantages from existing strengths, while maintaining one of the highest standards of living in the world.

Restructuring is a two-sided process where firms alter or close unprofitable activities and others open to take advantage of new opportunities. The result is a qualitative change in the composition of employment and output. The balance between negative restructuring (closures and downsizing) and positive restructuring (openings and expansions) depends on both the macroeconomic climate and the economy's institutional framework.

The aggregate results of this type of microeconomic restructuring are summarized in Figure 1, which shows historical trends in the proportion of the workforce employed in different sectors.

Figure 1

Ontario Employment by Industry
1931-1991



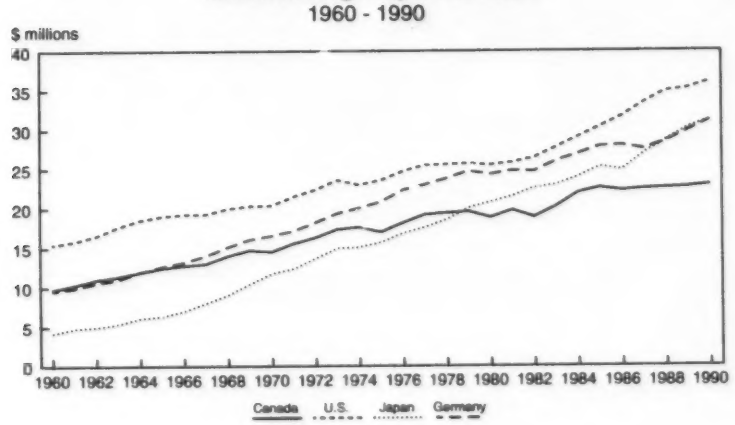
* Health, Education, Public Administration and Defence employment for all levels of government.
Source: Statistics Canada

innovation-based activities. This shift must be based on investment in key areas such as labour and management skills, more flexible organizations and improved use of resources.

Ontario's recent economic performance has been uneven. Absolute productivity – the output per capita in the economy – in Ontario is high. The late 1980s were marked by rapid economic expansion. At the same time, Ontario's and Canada's productivity growth rate has been well below other industrialized economies, particularly in the manufacturing sector (see Figure 2). This reflects lagging investment in equipment, people and technology.

Figure 2

International Trends in Manufacturing Output Per Hour
1960 - 1990



Source: U.S. Department of Labor, Statistics Canada and Ontario Ministry of Treasury and Economics

The recession of the last two years has exacerbated these trends and focused attention on the negative side of restructuring. Restructuring may involve downsizing or closure of some operations, and renewal and growth of others, as new competitive advantages emerge. The balance of positive and negative impacts is predicated not only on the macroeconomic climate, but also on the strategic capacity of people, organizations and systems in the economy to anticipate change.

A strong Ontario economy in the 1990s cannot be built on the basis of low wages, abuse of the environment or low levels of public service and unrealistically low tax levels. Ontario's standard of living as an advanced industrialized economy will be maintained through the production of high-quality, higher value-added goods and services, not

Ontario's Economic Performance: 1983 - 1991

Figure 3

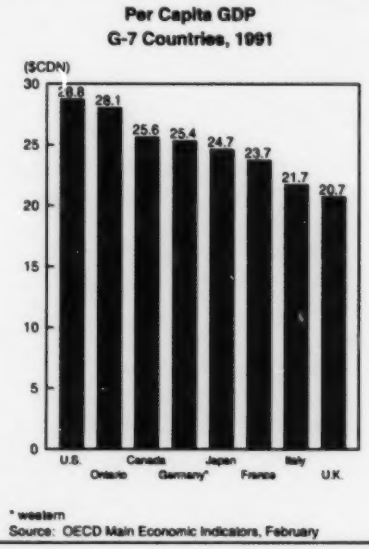
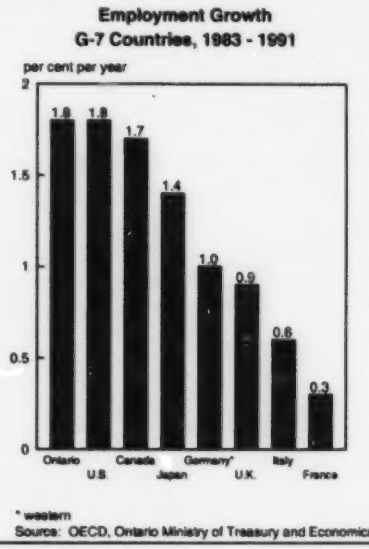


Figure 4



In 1991, Ontario's Gross Domestic Product (GDP) per person was $28,100, one of the highest levels in the world.

Ontario's GDP per capita is the highest among the Canadian provinces and exceeds that of all but seven U.S. states.

Over the 1983-1991 period, Ontario's real GDP growth averaged 3.6 per cent, outpacing all G-7 nations except Japan.

Even with the declines in employment in 1990 and 1991, employment growth in Ontario averaged 1.8 per cent over the 1983-1991 period, as fast as any of the G-7 nations.

through erosion of important gains in equity or through a diminished quality of life. In Ontario and other advanced economies, the system of social services reflects the important role social security plays in sustaining economic growth. Fairness and equity throughout society and the economy are critical goals, not only in and of themselves but also in terms of developing the full economic contributions of all Ontarians.

Investment spending, which enhances the future productive capacity of the economy, is vital to accelerating productivity growth. The Government has a specific and critical role to play in helping to secure investment in the

future. Changes in the way the economy functions require changes in the priorities and methods of government policy.

The 1992 Ontario Budget reflects this Government's responsibility to provide leadership in this transition. This leadership is being exercised in cooperation with business, labour and community groups. Both at the broad conceptual level and at the detailed implementation level, the Premier's Councils, the Fair Tax Commission, the Advisory Committee on a Telecommunications Strategy for Ontario, the Ontario Training and Adjustment Board and a wide range of sector and program consultation mechanisms are integral to the process of developing and implementing policies that promote increased innovation and productivity. The framework described in this paper will help organize and coordinate these diverse efforts.

Eight primary influences on the effectiveness and profitability of private and public investment are identified. These are macroeconomic and regulatory policies, firm organization and sectoral strategies, labour market policy, social infrastructure, physical infrastructure, technology, the financial system and the environment. Using this framework, the Government is redirecting policies toward increasing productivity and increasing innovation.

Directly and in partnership with business, labour and communities, the Government will undertake essential investments in training, technology, infrastructure and institutions. Policies announced in the 1992 Budget will also improve the efficiency and flexibility of public services. These and other measures will encourage positive structural change and help build a more equitable and prosperous Ontario.

Ontario's Investment Advantages

Ontario businesses and workers are among the most productive in the world. This wealth-generating capacity offers a solid foundation for future economic development.

Strategic Factors

- The United Nations Development Program ranks Canada as the best place to live in the world based on factors such as life expectancy, literacy and standard of living.
- Ontario's central location offers superior access to North American markets. Total household income within one-day's trucking distance (650 kilometres) of Toronto is higher than for any other major North American city.
- Ontario has the highest concentration of head offices and executive talent in Canada. Over half of Canada's top 100 non-financial corporations are based in Ontario. The Toronto financial hub is home to Canada's largest equity market and the centre of banking, trust, insurance and securities activities.

Dynamic Economy

- Ontario's industries are competitive in international markets. International exports are equal to 30 per cent of provincial GDP, higher than all G-7 countries except Germany.
- Ontario has developed internationally competitive sectors including manufacturing, automotive, financial services, forestry and base metal mining. An advanced manufacturing cluster is anchored by international firms such as Northern Telecom, IBM Canada and General Electric Canada. Ontario firms have access to world-class universities and research networks.

Skilled Labour Force

- The labour force is well-educated; half of all workers have at least one year of university or college education, up from 30 per cent in 1980.
- The province's employment to population ratio of 66 per cent is higher than any industrialized country.
- Multicultural diversity offers significant international trade and financial linkages.

Strong Resource and Infrastructure Base

- Ontario's resource base includes forests, minerals, water and agricultural lands that will continue to contribute to economic development.
- Ontario benefits from well-developed physical and communications infrastructure. According to the *World Competitiveness Report*, 1991, Canada ranks first in the world in power supply, second in roads, and third in telecommunications.

The Challenges Facing Ontario

Through the 1990s and beyond, productivity growth will depend on the ability to develop advanced technologies, along with the flexibility to apply them effectively. This will require expanded private and public investment, an upgrading of labour and management skills across the economy and fundamental changes in the way production is organized.

Recession, Recovery and Structural Change

After growing faster than any of the G-7 economies over the 1983-89 period, Ontario entered a severe recession in 1990. The severity of the recession has reflected both cyclical and structural forces.

- Over the past decade, the Ontario economy has become increasingly dependent on industries that are sensitive to interest rate increases, particularly auto assembly. As real interest rates in Canada and the United States rose to near-record levels in 1990, North American sales of autos and other durable goods fell sharply.
- With nearly a third of Ontario output exported to foreign markets, and nearly 90 per cent of that volume destined for the United States, the 20 per cent appreciation of the Canadian dollar relative to its American counterpart over the past five years had a severe impact on employment and profitability in Ontario.
- The Free Trade Agreement has caused dislocation, particularly in manufacturing, during a period of low investment and widespread economic weakness.
- The Goods and Services Tax caused a dramatic fall in consumer spending.
- The combination of the appreciating dollar, the Free Trade Agreement and the GST have encouraged cross-border shopping, damaging the retail sector.

The recession resulting from these trends and policies has combined with growing global competition to intensify pressure on firms operating in Canada to close or reorganize, and has led to a sharp decline in investment.

The cyclical downturn has slowed the pace of positive structural adjustment in Ontario. With substantial excess capacity, and profits as a share of provincial income at the lowest point since the 1930s, many firms have had neither the incentive nor the ability to undertake the investment required for positive restructuring. Without this investment, and the technological and organizational innovation that go with it, Ontario firms will fall behind international competitors. The 1992 Ontario Budget recognizes the investment imperative and the critical role of corporate

profits through a number of specific tax measures geared towards encouraging business investment.

The consensus among economic forecasters is that Ontario's economy will experience a demand-driven cyclical recovery over the next three years that will result in growth rates as strong as in any of the major industrialized countries. This will lead to a recovery in both markets and profits. The cyclical recovery will be based primarily on a recovery in the demand for the products of Ontario's traditionally strong industries (autos, housing and some resource industries). Although Ontario cannot rely on these industries alone to provide a sustainable competitive base, their recovery and the resulting spin-off activity will provide Ontario firms with an opportunity to expand investment in productivity-enhancing processes and products. This investment is central to revitalizing the supply capability of the Ontario economy, both in areas of traditional strength and in new industries, through the 1990s.

Macroeconomic Outlook

A number of factors have set the stage for an economic recovery this year in Ontario. The decline in interest rates over the past year, the lower value of the Canadian dollar and stronger growth in the United States are forecast to lead to an improving export picture, stronger housing investment and a turnaround in consumer spending. Ontario real GDP is forecast to grow by 1.4 per cent in 1992 and by 3.9 per cent in 1993.

DRI/McGraw Hill, the world's largest private-sector forecasting agency, predicts that Ontario's real growth rate over the 1993-95 period will exceed growth in all national economies in the group of seven major industrial nations (G-7).

To take advantage of the opportunity presented by the coming recovery, business, labour and governments will have to increase their commitment to innovation and economic development. The Ministry of Industry, Trade and Technology will set out the competitive fundamentals of the Ontario economy and suggest cooperative business and government actions in a forthcoming paper on industrial strategy. The Premier's Council on Economic Renewal is further examining the role of innovation in the provincial economy.[5] These reports will examine institutions and processes through which business, labour, government and others can cooperate in identifying and developing the strategic opportunities that will support Ontario's competitive advantage into the 21st century.

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5 Ministry of Industry, Trade and Technology and Premier's Council on Economic Renewal, forthcoming.

New Technology and Globalization

The development and application of new technologies carries profound implications for the global economy, and for Ontario's role in that global economy. Changes in information technology (including micro-electronics, telecommunications and computers), material science, biotechnology and other fields have made possible a broad range of new goods and services. Computerization and other information technologies, in particular, have also allowed for radical changes and productivity improvements in the production of goods and services throughout advanced industrialized economies.

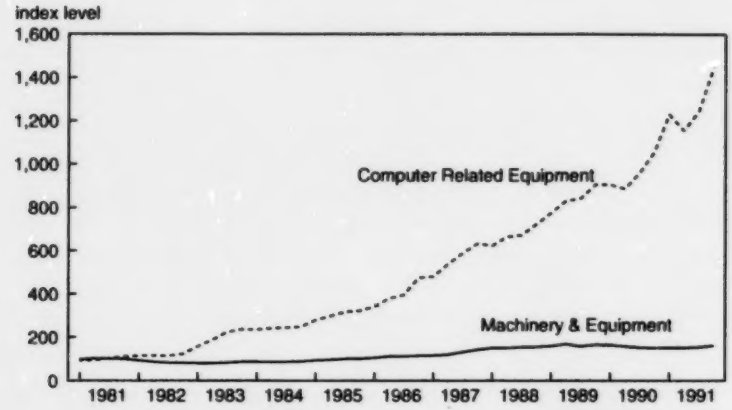
The price of information processing and computing capacity has fallen at a roughly continuous rate of 25 per cent per year over the past three decades.[6] This shift in relative prices has been profound, dwarfing the impact of the oil price shocks of the 1970s, for example.

The early impacts of information technology were modest, for two reasons. Information processing was initially a relatively minor input in most industries. Also, significant organizational, training and managerial changes were required to take full advantage of the new technologies. More recently, the improved quality and the cumulative impact of the declining price of information technology have resulted in applications across a broad range of production and delivery functions. As a result, there has been mounting pressure on older technologies, intensifying competition and accelerating obsolescence. This is reflected in the fact that in Canada, as elsewhere, real investment in computer-related equipment has far outstripped investment in other forms of machinery and equipment over the past decade (see Figure 5).

6 K. Flam, *Targeting the Computer*, The Brookings Institute, Washington, 1987.

Figure 5

Real Investment in Selected Fixed Assets
1981-1991, Canada



Improved communications technology and the ability to automate the assembly line retooling functions that formerly required scarce skilled labour have sharply expanded the potential for producing uniform, high-quality goods and services in less-developed countries. Multinational enterprises have a unique capacity to redirect investment on a global scale, taking advantage of sophisticated technologies and organizations and lower cost locations.

At the same time, these new technologies provide opportunities for firms in advanced countries to alter production and design systems rapidly and have contributed to breakthroughs in other areas such as materials technology and biotechnology. These advances allow rapid improvements in products and processes. Improving production and distribution processes offer a prime area of potential competitive advantage for firms in advanced jurisdictions – an advantage that can be employed economy-wide. According to Lester Thurow, Dean of the Massachusetts Institute of Technology's Sloan School of Management:

> Gaining an edge in high-tech processes will be important in almost every industry – from fast-food to textiles – and mastering process technology will become central to the success of almost every firm. The new information and telecommunications technologies that are being developed are also going to make most service industries into high-tech process industries.[7]

7 Lester C. Thurow, *Head-to-Head: Coming Economic Battles Among Japan, Europe and America*, 1992.

Technological innovation allows increases in the quality and productivity of capital, labour, energy and materials inputs. This, in turn, creates a demand for further investment in research and development. Advanced technical skills are thus central to creating an economy characterized by continuous innovation and upgrading. The interaction between technical knowledge and other factors may permit increasing returns to scale and allow innovation to raise, not just the level of output, but also its growth rate, permitting improved living standards.[8]

Technology can Reduce Waste as well as Increase Productivity.

- Under the Countdown Acid Rain program, Inco has committed $600 million to reduce sulphur dioxide emissions.
  - New smelting and refining technologies will lead to a 60 per cent reduction in emissions between 1990 and 1994.
  - There will be improved metal recovery rates, significant reductions in energy consumption and valuable by-products.
- Union Carbide of Canada has invested $5.3 million in developing a new process for scrubbing smokestacks that promises to reduce sulphur emissions by 98 per cent.
  - The process will make coal burning more efficient and take up to 80 per cent less space than conventional scrubbers.
  - The new technology is estimated to reduce the cost of a scrubber system by at least 20 per cent.

The rules governing international trade have also changed, exposing Ontario firms to greater competition. The Free Trade Agreement (FTA) has been of particular concern. Implementation of the FTA has increased competition for Ontario firms, increased the vulnerability of Ontario subsidiaries of foreign multinationals and resulted in an even greater dependence on U.S. markets.

Faced with such pressures, Ontario firms must restructure. This need is not confined to the export sector. Goods and services from other countries touch virtually all areas of Ontario's economic life. Industries that are not directly involved in international trade act as suppliers to those that are. The efficiency with which all goods and services, both public and private, are provided also affects the ability of Canadian firms to match competitors at home and abroad.

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8 Paul Romer, "Increasing Returns and Long-Run Growth," *Journal of Political Economy*, October 1986, p. 1003.

Opportunities in the Global Economy

Increasing productivity depends on expanding innovative activity throughout the economy. Changes in the international division of labour in the global economy create the possibility of, and the need for, a reorientation of production in Ontario toward activities that rely on continuous innovation. Comparative advantage in the past has often relied on physical endowments such as a country's resource base. By contrast, comparative advantage in technology-intensive activities can be created by firms and governments. The Government of Ontario is committed to supporting the development of these advantages – both for Ontario firms in new technology-intensive sectors and through the application of technology to existing products and processes.

The creation of an institutional framework that promotes the development of a firm's competitive strength is critical.[9] The provision of education, training, infrastructure and support for research and development are accepted internationally as legitimate and necessary roles for government in support of economic renewal.

To take advantage of the opportunities presented by new technology, new kinds of cooperation are needed between management and labour, and between firms, to develop knowledge, services and markets. In recent years, the creation of strategic relationships with key suppliers, customers and competitors has become a source of strength for many firms, as they share skills and resources.

Firms and unions must also replace adversarial approaches with cooperative ones. There is evidence that this is already happening. In the Canadian steel industry, for example, this sort of cooperation is increasingly common. Recent examples, such as the willingness of the Steel Company of Canada (Stelco) and the United Steelworkers of America to cooperate in improving production systems and in marketing products, illustrate the potential positive impact that labour-management cooperation can have.

Structural Change in Ontario

Like firms in industrialized nations around the world, Ontario businesses are shifting their economic focus to higher value-added goods, services and processes. The value added to the product or service may be superior

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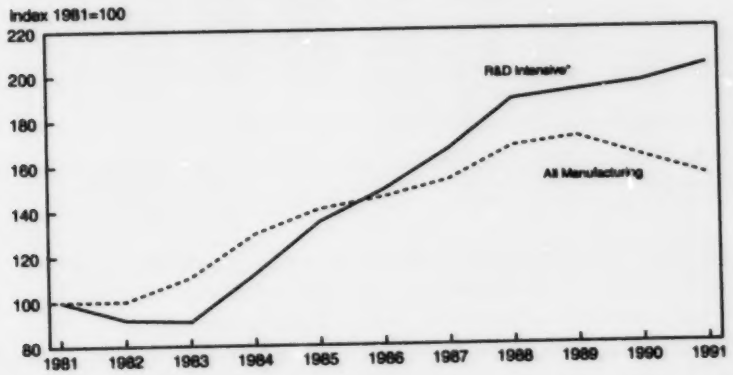
9 As a recent OECD report notes, "...the competitiveness of the firm depends not only on its own competitive strength but also on the interaction of its capabilities with the capabilities of the external environment in which it operates. Smart firms may have the potential to build superb mousetraps but not to determine the key policy and institutional aspects of their external environment." OECD, *Strategic Industries in a Global Economy: Policy Issues for the 1990s*, Paris, 1991, p. 84.

design, quality or specialized characteristics. During the 1980s, business services, research and development-intensive manufacturing and other knowledge-based industries accounted for a disproportionate share of output and employment growth (see Figure 6).

Figure 6

Shipments of R&D-Intensive Manufacturing vs. Total Manufacturing, 1981-1991



Source: Statistics Canada
* Communications, scientific, aerospace, pharmaceutical and computer equipment

While this represents significant progress, enterprises in other advanced jurisdictions have moved even more quickly to implement advanced technologies. A survey carried out for the Economic Council of Canada in 1988 and 1989 showed that in several major industry groups, a smaller proportion of firms in Canada used advanced manufacturing technologies than their U.S. counterparts (see Table 1). Firms in the United States, in turn, lag their counterparts in Japan and several European countries in developing and applying advanced technology. Lagging innovation is reflected in Ontario's weak manufacturing productivity growth in recent years. The high level of foreign ownership in the Ontario economy has contributed to low levels of private research and development activity, as transnational corporations tend to concentrate innovative activities near their head offices.[10]

10 Premier's Council, *Competing in the New Global Economy*, 1988, p. 183.

Proportion of Establishments using Advanced Technologies **Table 1**

Industry Group	Canada (1989)	United States (1988)
Transportation equipment	12.0	19.4
Electrical and electronic equipment	15.2	21.5
Instruments and related products	13.1	18.7
Machinery	14.0	18.3
Metal fabricating	9.1	13.2

D.G. McFetridge, *Analysis of Recent Evidence on the Use of Advanced Technologies in Canada*, Economic Council of Canada, forthcoming.

The relatively slow pace at which Ontario firms have developed and adopted new technology reinforces the need for cooperative actions to accelerate the process. The Government has announced a number of initiatives in the 1992 Ontario Budget to help address this concern. These are described below.

The Importance of Private Capital Investment

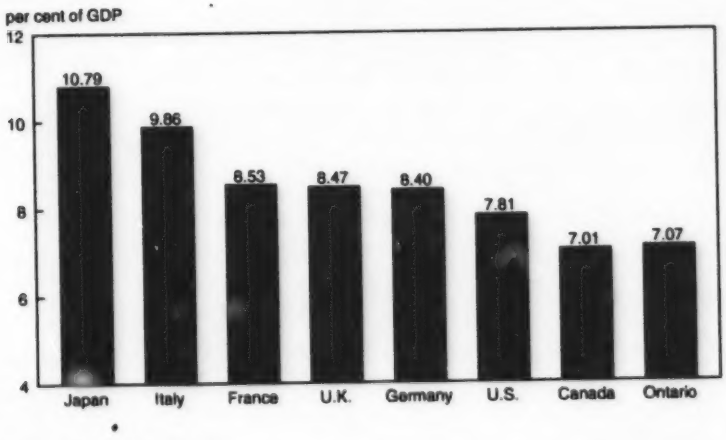
Investment in machinery and equipment provides a critical mechanism for incorporating technology advances into the actual production and distribution of goods and services. In the past, economists assumed that the contribution of physical capital to economic growth was equal to its share of GDP. There is increasing evidence that this assumption substantially underestimates the role of capital accumulation in growth. It neglects the benefits of the new technology that come with physical investment. A cross-sectional study of productivity growth by the Organization for Economic Co-operation and Development (OECD) reveals that "a slowing of capital accumulation may be tantamount to a less rapid diffusion of new techniques."[11]

Ontario's investment in machinery and equipment was lower than in any of the G-7 economies, except Canada as a whole, over the 1974 to 1989 period (see Figure 7).

11 A. Stephen Englander and Axel Mittelstadt, "Total Factor Productivity:Macroeconomic and Structural Aspects of the Slowdown," *OECD Economic Studies*, Spring 1988, pp. 28-29.

Figure 7

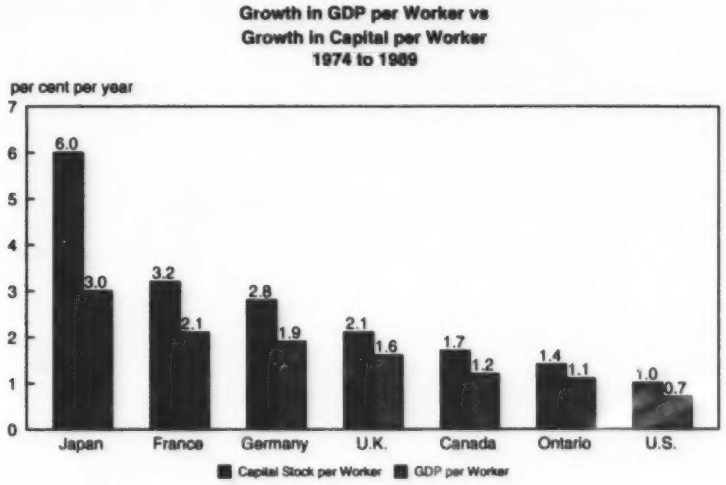
Machinery and Equipment Investment
1974 to 1989



Source: OECD and Statistics Canada

Knowledge-intensive, high-wage occupations generally require workers to be equipped with sophisticated machinery and equipment. Relatively slow growth in the amount of capital per worker has been a significant contributing factor to the slowdown in North American productivity growth relative to the G-7 countries (see Figure 8).

Figure 8



Source: OECD, Statistics Canada, and
Ontario Ministry of Treasury and Economics

Physical capital investment is a necessary, but not sufficient, condition for productivity growth. It has been found that a large amount of capital expenditure in a location where the workforce is not adequately trained, or where the institutional framework inhibits growth, earns a subnormal rate of return. In such a case, it is not possible to sustain the growth of physical capital investment.[12] Private investment can only be sustained where it is effective and profitable. This in turn requires a social and economic policy framework that is supportive of productivity growth. The Government is therefore redirecting spending and other policies toward activities that will help make Ontario competitive in the global economy.

12 Paul Romer, "Capital, Labour, and Productivity," *Brookings Papers on Economic Activity*, 1990 Special Issue, p. 339.

Framework For Supporting Investment

Governments in advanced economies have a necessary and legitimate role to play in promoting the competitive advantage of firms. Investment in plant, technology, training, infrastructure and flexible organizations is critical for renewed productivity growth in Ontario. This requires a joint effort among business, labour and government. Government programs and private activities must be redirected to promote the kinds of change that lead to a new, more flexible and knowledge-intensive economy.

Governments throughout advanced industrialized jurisdictions have recognized the importance of facilitating investment. The integration of public policy to promote effective social and economic investment is particularly important in the context of a relatively small and open economy such as Ontario's.

The initiatives contained in the 1992 Ontario Budget reflect the Government's commitment to promoting innovation and investment in Ontario. This focus is consistent with a recent OECD study which concluded that,

> The major criterion for policy selection is the impact on the innovation process, because for advanced countries, innovation is the primary determinant of competitiveness at the level of the firm and of rising productivity at the national level.[13]

That does not imply that governments should neglect social development issues. Building flexibility into a modern economy requires that workers have security, that they have alternatives and opportunities in the event of displacement and that they have the right to a say in how their workplaces operate. The Government's social agenda supports economic renewal.

The Government of Ontario has developed a strategic framework that will help ensure that its policies promote effective investment, both public and private. This means changes in the mix of government policies and programs, in the way government services are delivered, and in the way the government affects others in the economy. In some cases, this involves shifting the responsibility for the design, direction and delivery of services to others. For example, training under the Ontario Training and Adjustment Board will be managed and delivered cooperatively by business, labour and community groups.

Figure 9 illustrates eight primary influences on the effectiveness and profitability of investment. The Government's activities in each of these areas are being re-examined. In framing government policies, it is

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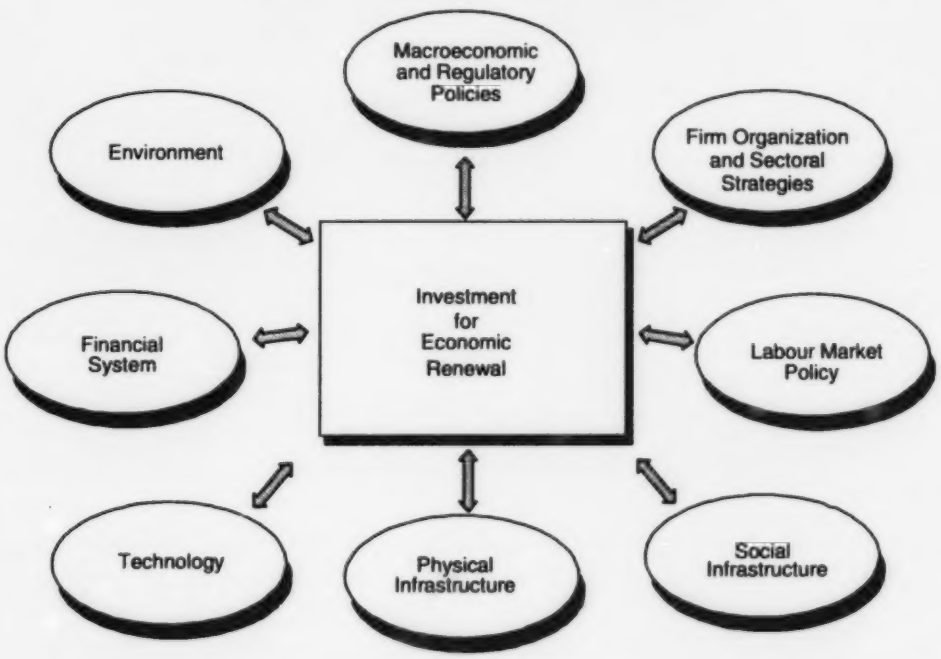
13 OECD, *Strategic Industries in a Global Economy: Policy Issues for the 1990s*, Paris, 1991.

important that potential implications for investment be at the forefront of decision-making. The Government will continue to work internally and with business, labour and communities, in putting this framework into practice through a set of consistent policies that promote private and public investment, boost the productivity of the Ontario economy and create jobs and wealth.

Figure 9

Framework for Economic Renewal



A. Macroeconomic and Regulatory Policies

Many Provincial policies, including taxes, spending levels and regulatory standards and processes, have a significant impact on investment. At the same time, most major macroeconomic levers that affect aggregate demand in the economy such as interest rates, exchange rate and trade policies are influenced but not controlled by the Province.[14] The Government is committed to a moderate tax burden, improving the efficiency of its spending and streamlining the regulatory system.

The keys to managing taxation and spending levels are efficient program delivery and solid economic growth.

Efficient Delivery of Public Services

Total Government of Ontario spending, including transfers, accounts for approximately 19 per cent of provincial GDP on a public accounts basis. Careful management and strategic targeting of these financial and human resources is required so that the Province has the fiscal and program flexibility to advance priorities for economic renewal and social development.

Government, like other institutions in our society, has to change to meet the challenges of the 1990s. Over the past year, the Government has undertaken a series of program reviews to assess where spending efficiencies could be achieved and how public services could be improved.

Rather than making drastic program cuts with no regard for how those cuts would affect the people of Ontario, this Government instituted a process of reviewing policy and programs. This year's review encompassed a number of key program areas where growth was particularly high, including health care, social assistance and internal government spending.

The results to date are impressive. Ministries came forward with a range of options to improve the efficiency of programs and the delivery of services and to reduce operating expenditures. Specific program reviews alone have produced cost savings for 1992-93 that are estimated at over $700 million; the impact will be much larger in future years.

Broader public sector services, provided through hospitals, schools, municipalities and social service agencies, form a major part of the province's high quality of life. At the same time, they are the workplaces for many of our most highly skilled men and women and the source of a

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14 Increasing provincial expenditures has a limited impact on output and employment. Expenditures would have to increase by approximately $6 billion to reduce the unemployment rate by one percentage point.

Re-engineering Government: The ESPRIT Project

The Ontario Ministry of Revenue has become a leader in the area of business process change with its business re-engineering project, ESPRIT (Enterprise Strategic Planning Revenue In Transformation).

This project began in 1988 out of the necessity to find new ways to deliver the Ministry's services to the taxpayers of the province. The Ministry had gone through many years of improvement with better training, good application of information technology and a decade of focusing on customer service. However, with the ever-increasing gap between the growth in workload and complexity versus available resources, it became apparent the Ministry had to embark on a campaign of massive change. The only other option would be a large infusion of dollars from the Government.

After much study, the Ministry decided that it had to achieve productivity improvements of 80 per cent. What it had to accomplish was a radical revamping of its entire work process while dramatically improving customer services and providing interesting and challenging work for its employees.

These objectives coincided with a new phenomenon in the business world known as business re-engineering and thus the Ministry became a pioneer in this field. In 1990, the Ministry embarked on a five-year campaign to implement this change.

One example of this approach that has already been implemented is an end to property assessors calling at every home in Ontario to value each property for municipal tax purposes. By re-evaluating the process and using new technologies, the Ministry now sends out information forms to all individual property owners showing them what is on the government databases relating to their home and asking them to verify and update the information. The homeowner is no longer bothered by the inspections and the Ministry can keep its records up-to-date at a very low cost.

The ESPRIT project provides a practical example of the way in which new technology can be combined with organizational change to yield significant gains in efficiency and productivity.

The success of the Ministry of Revenue project has made it a case study and has elicited detailed enquiries from governments in several countries, including Britain, the Netherlands, the United States and Canada and from many large and small businesses across North America.

In 1992 the Ministry, with ESPRIT, has reached the final list of nominees for the Computerworld Smithsonian Awards, one of the most prestigious awards programs for innovative uses of information technology worldwide. This program was established in 1989 to recognize the positive impact that information technology has had not only in business, but also in all aspects of human endeavour.

number of the innovations and scientific developments that have earned Ontario worldwide recognition.

Reform of broader public sector operations responds not only to fiscal restraint but also to the need to bring underlying cost structures into line while maintaining a commitment to high-quality public services. It also meets the challenge of preserving employment, improving workplace conditions and effecting fundamental reform in the conduct of labour relations.

Transition assistance funds totalling $160 million are being made available to schools, colleges, universities and hospitals to begin the process of restructuring and reform throughout their operations. As a basic condition of eligibility for these funds, sectors and institutions are being asked to involve their employees and service-users in finding new ways for sharing responsibility and accountability and for ensuring that the burden of restraint is fairly shared.

Through the newly created Broader Public Sector Labour Relations Secretariat, the Government is working closely with labour and management to facilitate change and cooperate in constructing a more effective public sector.

Improving The Regulatory Process

High regulatory standards play an important role in protecting Ontario's environment and in providing certainty to consumers, investors and the community. In the absence of efficient environmental regulation, for example, the risk of large future clean-up costs is increased. Nevertheless, there is a need to improve the quality and speed of the regulatory system. Delay and uncertainty hinder environmental protection and other forms of regulation and are costly for all participants in the regulatory system. With the accelerating pace of innovation in the economy and intensified international competition, the importance of minimizing risk and uncertainty has increased.

Improving the timeliness, efficiency and certainty of the regulatory process can reduce the cost of doing business in Ontario and help keep jobs here.

A provincial facilitator was recently appointed to identify major construction projects that should proceed without delay. The facilitator will help cut through the layers of provincial and municipal regulations that can unnecessarily delay projects that do not pose a threat to the environment.

Under the initiative, Clearing the Path for Business Success, the Ministry of Industry, Trade and Technology will coordinate and streamline regulatory and licensing processes required of businesses prior to their start-up. This will reduce the effort it takes for companies to work with the Government.

While reforms to the *Planning Act* and the *Environmental Assessment Act* (EA) are under review, the Ministers responsible for their administration are proceeding with changes to make these processes more "user-friendly".

The Minister of Municipal Affairs will reduce the wait for a hearing at the Ontario Municipal Board from 15 to 18 months at present to 6 to 9 months. The Minister will release guidelines to streamline the plan review process by implementing a 90-day timeframe for comments and decision-making. The Minister will delegate more approval authority to competent municipalities. A one-window approach to the land use planning system will be developed and regional teams of provincial agencies will be set up to facilitate service delivery and decision-making.

The Minister of the Environment is committed to improving the process by providing clear direction to all participants, for example, with guidelines that set out the requirements of the EA process for particular types of undertakings. Administrative improvements will expedite the completion of government reviews, streamline practices and procedures and avoid duplication with other legislation, including the *Planning Act*. The EA Board is also undertaking initiatives to ensure an efficient, effective hearing process, including training, increased access to legal advice and faster hearings.

Taxation

Studies indicate that the total tax burden for Ontario firms, including income, capital, property and payroll taxes, is competitive with that of other jurisdictions.[15]

In particular, studies show that payroll taxes in Ontario as a percentage of gross annual payroll are lower than those in competing jurisdictions. When employer-paid health care is included in the comparison, Ontario's competitive position improves significantly. For example, U.S. manufacturers pay, on average, about $4,200 (Cdn) per employee for health care coverage whereas Ontario manufacturers pay about $650 (Cdn). This advantage is due, in part, to Ontario's excellent publicly funded health care system.

Additional tax incentives provided to business in this Budget, when combined with recent federal measures, significantly improve the tax competitiveness of manufacturing and processing operations based in Ontario.

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15 Ontario Ministry of Treasury and Economics, *Corporate Tax Comparisons: A Case Study Approach*, Toronto, 1991. Since the mix of taxes varies by jurisdiction, the tax burden of any particular tax system will vary by sector and level of profitability.

The 1992 Budget puts in place concrete measures to boost business investment in machinery, equipment and research and development (R&D).

- A reduction in the rate of Ontario corporate income tax from 14.5 per cent to 13.5 per cent on income from manufacturing and processing, mining, logging, farming and fishing will boost new investment in Ontario's important manufacturing and resource sectors.
- The capital cost allowance rate will be increased from 25 per cent to 30 per cent for new investment in manufacturing and processing machinery and equipment effective February 26, 1992. This measure will allow a more rapid deduction of the cost of capital equipment against taxable income.
- The small business income tax rate reduction from 10 per cent to 9.5 per cent will encourage entrepreneurship and job creation.
- The capital cost allowance rates will be increased for specified investments in freight-hauling and rail equipment to help facilitate the modernization of the Ontario trucking and railway industries.
- Ontario will parallel measures announced in the federal budget to expand the scope of expenditures eligible for R&D tax incentives. This will have the effect of broadening eligibility under the R&D Super Allowance.

B. Firm Organization and Sectoral Strategies

The economy is composed of many sectors, each with its own needs and opportunities. Through cooperation, firms in a sector can accomplish projects that would be too large for an individual company or that create widespread benefits for the sector as a whole. Sector partners can work out joint solutions to common problems. Cooperation among firms, labour unions and other institutions can spark new ideas and make new linkages possible.

Sectoral cooperation expands the investment opportunities available to companies, sector institutions and government. Cooperative actions that contribute to sector development increase the returns on existing and prospective investments.

The Government is already working extensively with sectors such as telecommunications, automotive products, construction, aerospace, food processing, plastics and tourism to develop strategies that respond to their challenges and opportunities. The use of consultative forums to identify useful joint actions that would strengthen sectors will be expanded to other sectors.

The Sector Partnership Fund

The Fund will have a three-year, $150 million budget. Assistance will be available to approved cooperative sector projects that lead to higher value-added activities. Projects will emerge from sectoral consultations between the Ministry of Industry, Trade and Technology and representatives of business, labour and other parties critical to the success of a sector. It will support projects in five areas:

Developing Sectoral Technological Capability

Cooperative mechanisms for diffusing advanced technology and joint research provide suitable platforms for supporting a firm's own R&D efforts. The Fund could support initiatives to carry out pre-competitive research, diffuse best-practice techniques or develop industry-wide standards for products, testing procedures and emerging technologies.

Sector Promotion and Marketing

Sectoral or cluster-wide promotion and marketing activities that could be encouraged include trade and investment missions to targeted international markets, management training in the area of international opportunity identification and cooperative sector promotion to increase customer awareness. Sectors that could benefit from sector promotion include industrial design, environmental products and services, and information technology.

Sharing Sector Knowledge

The creation of linkages and networks improves the sharing of critical industry information. The Fund could support forums such as manufacturing trade shows, conventions, technical missions and publications to disseminate information on technology, competition, industry trends and issues, and regulations and standards.

Creating Specialized Infrastructure

Infrastructure investments targeted at the specialized needs of a sector may decisively increase the productivity and competitiveness of firms involved. Examples of sector-specific specialized infrastructure include computerized supplier networks, education and training facilities, and joint labour-management strategic planning.

Focused Upgrading Programs

In some sectors, it may be appropriate for the Sector Partnership Fund to assist a group of companies making critical investments that will upgrade their capabilities and enable them to respond to higher value-added market opportunities. Support would be contingent on broader sector endorsement through appropriate consultative mechanisms.

C. Labour Market Policy

One of the most important investments the Province can make is in the flexibility, quality and confidence of the Ontario labour force. For example, the recent decision by Ford of Canada to make major new investments in Ontario was based in large measure on the high quality of the Province's labour force.

New technologies, new forms of work organization and other structural changes in the economy require an unprecedented level of education, training, adaptability and cooperation on the part of workers and managers. When one of the major keys to success in the global economy is the ability to innovate, people must be able to learn new skills continuously and to apply them in new ways in the workplace.

Training of Ontario's workers and managers should constitute a strategic investment in the following areas: improving the management of our organizations; meeting current and emerging skill needs; equipping managers and workers with the attitudes and skills required in a knowledge-intensive, high wage economy; enhancing adaptability and productivity of the workforce; and developing the potential of people traditionally under-represented in the workforce.

This investment will be most effective in the context of a labour force development system in which:

- Training and adjustment programs are relevant to the needs of employers, and current and potential workers.
- Training and adjustment programs are coordinated, and the labour market partners have greater ownership and involvement.
- Workplace training, labour adjustment and "entry/re-entry" training are integrated within a single, labour force development system.
- Apprenticeship is reformed and expanded.
- Employers increase their investment in human resource development.

The Government of Ontario will also invest in workers by supporting both employment equity and pay equity for women. The Throne Speech reiterated the Government's commitment to tackling workplace discrimination. The 1992 Budget allocates funds to ensure that these priorities are addressed.

Education and Training

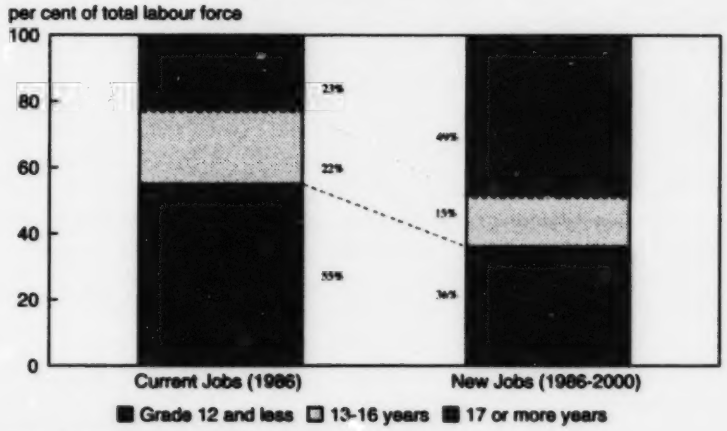
Many workers will find that they need higher levels of skills and education, both to qualify for jobs, and to engage in the lifelong learning and retraining that accompany an innovative, high value-added economy. Employment and Immigration Canada projects that by the year 2000,

almost half the new jobs created will require more than five years' education beyond high school. (See Figure 10.)

Figure 10

Labour Force Requirements

By Education Attainment



Source: Employment and Immigration Canada, 1989

Workers and managers will need higher levels of general education, such as language and computer literacy, as a foundation for learning more specific job skills. The Government is implementing reforms to education emphasizing literacy, numeracy, problem-solving and technology. Additional measures will help youth who leave school make the transition to employment or training, or from dead-end jobs back to school.

In a dynamic market-driven economy, skill needs change constantly and are sometimes unpredictable. Nonetheless, it is clear there will be increased emphasis on portable, generic skills, and all workers will require some skills that have traditionally been the prerogative of management. These include organizational skills, problem-solving and decision-making skills, listening and communicating skills, leadership abilities and the skill to adapt to lifelong learning and change as part of the daily routine.

Cooperation among industries and labour on a sectoral basis is increasingly important to supporting positive economic renewal. The Government is also entering a training agreement with the federal government and the Automotive Parts Sectoral Training Council to address the need for basic portable and certifiable skills within the industry, and is continuing to foster sectoral training arrangements in steel and other key sectors. A Canadian Plastics Training Centre will be established in cooperation with Humber College to meet the training needs of that industry.

Ontario Training and Adjustment Board

There is strong consensus that effective training, which maximizes the full potential of all human resources, is essential for developing a high-performance economy that can compete in the global marketplace. Training is also fundamental to raising individuals' skill levels and the rewards of enhanced participation in a productive economy. Effective and high-quality training can serve both economic and social needs.

The Ontario Training and Adjustment Board (OTAB) is being established as an independent agency of the Government. In order to ensure responsiveness to the training needs of Ontario's employers, workers and potential workers, it will be cooperatively led by representatives from business, labour, aboriginal peoples and equity groups as well as educators and trainers.

One of OTAB's priorities will be to implement substantial qualitative and quantitative improvements in workplace and sectoral training. There will be an increased emphasis on developing training that produces portable, generic and certifiable skills. The incorporation of these characteristics into workplace and sectoral training recognizes the importance of skills and knowledge as important factors in productivity, job security and mobility. Employers' training decisions will be based on needs and priorities that have been jointly identified by employees and management. The labour market partners that comprise OTAB will look at ways to reform areas of the apprenticeship system, building on its current strengths, such as in the construction industry.

A comprehensive approach to labour force development includes labour adjustment programs. OTAB will encourage sectoral and employer-level initiatives that take an anticipatory approach to the training needs of employers and workers prior to technological change or restructuring. Workers and potential workers will be encouraged to view training and skills-upgrading as a continuous process, in preparation for the many job changes they may have to make over their working careers, and to assume greater responsibility for their own training decisions. Employers will be encouraged to invest more in the training of their employees than is currently the case, in order to ensure the competitiveness of their firms.

OTAB will assume responsibility for programs and services to assist individuals in entering Ontario's labour force for the first time, or in re-entering after a prolonged absence. OTAB's unique partnership is intended to foster significant attitudinal change and an acceptance that it is both possible and necessary to broaden equitable participation in Ontario's labour force. A key priority will be to ensure that entry/re-entry training programs build skills that are valued by employers, and lead to the further acquisition of skills by individuals.

A major element of Ontario's vocational training network is the apprenticeship system, which combines on-the-job and in-school learning to

provide formal occupational training and certification in 68 provincial trades. The apprenticeship system serves 53,000 full-time and 40,000 part-time trainees, as well as 25,000 employers.

Apprenticeship offers many advantages, including national standards and certification, portable skills, substantial labour-management involvement and a low-cost alternative to institutional education.

To address immediate pressures, the Government is improving and developing apprenticeship by expanding the Secondary School Workplace Apprenticeship Program, addressing skills shortages, introducing new trades, improving standards, enhancing access and counselling tools, and developing community-based partnerships for access by target group members.

Training and Jobs for the Long-Term Unemployed and for Social Assistance Recipients

As the range of skills required by society changes, there will be dislocation of workers. Providing the training and support these people need to get back into the workforce is a central focus of government policy. To help workers who are being laid-off make a smooth transition to new jobs or training, the Government will continue providing enhanced levels of support to labour-management committees, including needs-assessment, counselling and skills training.

The recession and the significant structural changes in the economy have caused levels of unemployment in Ontario to soar over the past two years. More than 550,000 Ontario workers are currently unemployed, representing 10.5 per cent of the workforce. One in four of these people has been unemployed for more than six months. There are now more than 1,000,000 people dependent on social assistance in Ontario.

The impact of this on people's lives is clearly enormous, but unemployment of this magnitude also represents a waste of human potential and loss of future productive capacity. The longer workers remain unemployed, the more discouraged they become, and the more their job skills decline. It becomes more difficult for them to participate in and contribute to economic recovery. This further threatens the economic recovery and discourages private sector investment. At the same time, the cost of income support is rising as a share of provincial expenditures.

A shift in emphasis from a passive approach, based on providing income support, to a more active approach based on investing in the skills and employment supports that individuals need to re-enter the workforce is more in keeping with the needs of the emerging innovation-based economy.

The JOBS ONTARIO Training Fund, announced in the Budget, is a key element of the Government's social and economic investment strategy. This $1.1 billion program is designed to accelerate job creation as the economy recovers from the recession, and at the same time to give those who are facing long-term unemployment access to meaningful training and employment opportunities, and to supports such as child care. The program is designed to assist unemployed workers who have exhausted or are not eligible for Unemployment Insurance benefits, and people on social assistance. Up to 100,000 individuals will participate in this program over the next three years.

A major component of the program will be an Ontario Training Credit, available to private-sector employers who hire an eligible individual by adding a new position to their workforce. The credit may be used to cover the costs of training program participants, as well as existing employees. As many as 80,000 existing employees are also expected to benefit.

A second part of the program will encourage larger employers and sectoral associations to create jobs for eligible unemployed workers. The JOBS ONTARIO Training Fund will also encourage the development of new community-based enterprises that are committed to creating jobs for the long-term unemployed, through special community and regional development initiatives.

To ensure access to the JOBS ONTARIO Training Fund, the Province will provide supports for those needing child care and pre-employment training. Up to 20,000 subsidized child care spaces will be created for program participants, increasing the total number of subsidized child care spaces in Ontario by nearly 40 per cent. This will make an important and lasting contribution to Ontario's child care system, while helping low-income parents to get back to work. In addition, pre-employment training will be provided to participants who need language or literacy upgrading.

Labour-Management Cooperation

By North American standards, Ontario is a highly unionized and relatively high-wage jurisdiction. Good industrial relations can be a competitive advantage for Ontario firms. Business and labour share a common interest in raising the productivity of the Ontario economy. Recent examples where positive labour-management relations have contributed to boosting exports of tradable goods and services are:

- The Communications Workers of Canada is currently working with Northern Telecom and the Mexican telecommunications company and their unions to export new equipment along with union-assisted retraining programs to Mexico.

- The United Steelworkers of America, through the Canadian Steel Trade and Employment Congress, is working with Canadian steel companies to assist in the restructuring of the Polish steel industry.

The general outlines of new forms of work organization are clear: reduced levels of supervision and new approaches to joint control, multi-skilling of employees and the growth of work teams. Putting these general principles into practice in local work settings, many of them unionized, is the challenge. Collective bargaining presents an opportunity for labour and management to negotiate increased flexibility in work rules, added security and a new sharing of responsibility.

Economic restructuring is a reality for many firms in the Ontario economy. The active involvement of workers and unions can be the key to making that process work. In some cases, such as the Spruce Falls Power and Paper Company, this can be done through worker ownership supported by the Ontario Investment and Worker Ownership Program. In other cases, owners and workers are working together in making the ongoing process of economic restructuring and renewal more effective through joint efforts to introduce new technology, investment, product development and marketing.

Ontario Labour Relations Act Changes

The Government's discussion paper regarding proposed reforms of the *Ontario Labour Relations Act* (OLRA) includes a suggestion for a new Work Organization and Adjustment Service. The aim of this proposal is to help employers and unions work together to implement positive economic change at the firm and sectoral level.

As the Ontario economy shifts towards more knowledge-intensive production, the importance of workplace innovation grows. This means that an innovation-based economy depends on meaningful employee participation in decision-making and a greater sense of confidence and security. One of the central aims of the OLRA discussion paper was to suggest ways to start adapting our labour relations system to the need for increased cooperation between labour and management. This will not be an easy task, but it is essential to the rapid and efficient introduction of new technologies and work organization.

Labour-Management Cooperation in Practice

- At the Inglis plant in Cambridge, the local management and a local of Communications and Electrical Workers of Canada are engaged in reorganization of work to match a new product mandate for appliances.
- Also in Cambridge, a local of the United Steelworkers of America is engaged in a work reorganization project with local management at Walker Muffler that has seen a major growth in auto part exports to Japan and Europe as well as expanded North American production.
- The Shell plant in Sarnia is an example of future trends in labour-management cooperation. Extensive involvement by the Energy and Chemical Workers of Canada local in the design phase of the plant helped to ensure an efficient working environment. An innovative payment-for-knowledge reward system encourages multi-skilling and organizational flexibility. The plant's organizational design helps to provide both efficiency and equity in the workplace.
- The restructuring of Algoma Steel Inc. in Sault Ste. Marie offers an example of labour, financial institutions, business, community and government cooperation. Flexibility on all sides has saved jobs and investment and provided an opportunity to restructure workplace practices towards higher productivity and better working conditions.

D. Social Infrastructure

The Government of Ontario supports a comprehensive set of social programs that protect disadvantaged citizens and help to ensure the security and dignity of all Ontarians. The Province is committed to ensuring that social programs also encourage training and flexibility, and promote labour market participation. This contributes to growth in Ontario's productive capacity.

Child Care

In the majority of families today, both parents work. The labour force participation rate of working-age women has nearly doubled during the past two decades, to over 60 per cent. Over one million children in Ontario require some form of child care, while their parents are either working or at school[16]. Under these circumstances, the priority must be the provision of affordable, accessible and quality child care.

Without child care services, many parents are unable to look for work or pursue training to improve their job skills. As a result, many parents are forced to forego the possibility of contributing more fully to the economy, and are left living below the poverty line.[17] This is especially true of the growing number of single parents. Nearly 190,000 single parents in Ontario are now relying on social assistance to support their families. As mentioned above, this is why child care has been made an integral component of the JOBS ONTARIO Training Fund for social assistance recipients and for those not eligible for Unemployment Insurance.

Among working parents, the absence of affordable, quality child care is often cited as a major factor contributing to workplace stress and high worker turnover. Investing in child care can pay important dividends in terms of improved employee morale and productivity and reduced employment costs.

The Government has already announced additional child care fee subsidies, and wage enhancements for child care workers. The Government has launched a series of consultations with a wide range of individuals and organizations concerned about the future of child care services in Ontario. It is now time to move forward with the next step – overall child care reform that will contribute to healthy child development and provide better support to working parents through a more affordable, accessible and soundly managed system.

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16 D. Lero and M. Shields, Canadian National Child Care Study: Introductory Report, Statistics Canada, 1992

17 Morley Gunderson and Leon Muszynski with Jennifer Keck, *Women and Labour Market Poverty*, Canadian Advisory Council on the Status of Women, Ottawa, 1990.

Health Care

The Province's substantial investments in health care – from public and community service to high-technology care for patients – have resulted in a system that is the envy of the industrialized world, and a key element in our economic and social well-being.

Ontario's publicly-funded health care system ensures that our workers are healthy and productive, in a highly cost-effective manner. Compared to the United States, which spends approximately 11 per cent of GDP on a private health care system that leaves 37 million people without coverage, Canada spends closer to nine per cent of GDP on a system that provides universal coverage.

The public health care system also promotes economic growth by encouraging mobility of workers. In the United States, workers are often inhibited from moving to new jobs because of loss of health care coverage for themselves or their families. Furthermore, in the United States, the private sector is primarily responsible for providing health care coverage, which increases payroll costs relative to Canada.

Ontario's health care industries also contribute directly to economic renewal. The Government is pursuing strategies to further promote health care industries by attracting major new investments by health care firms, emphasizing export potential and cost-containment technology, and by working with health care organizations to improve the management of health care to control costs, without reducing medically necessary services.

Affordable Housing

Adequate and affordable housing is a key infrastructure requirement for Ontario's economy. Affordable housing contributes to the development of healthy communities. The provision of good quality, non-profit housing achieves this goal, and contributes to economic renewal in Ontario in several ways:

- Non-profit housing maintains the home-building industry during hard economic times, keeping labour and highly skilled trades in the province. The availability of a local labour pool, which is supported by sufficient affordable housing, makes a market area more attractive to business as a location for investment.
- Non-profit housing contributes to housing intensification, innovative construction techniques and a reduction in poverty. In addition, many non-profit housing projects are associated with child care facilities and other social services that help low-income workers maintain their attachment to the labour force through work or training.

The Province's commitment to support the provision of an additional 20,000 non-profit housing units to be allocated over the next three years

spreads construction activity more smoothly over the business cycle. The JOBS ONTARIO Homes Fund will help ensure an ongoing supply of affordable housing, in addition to creating much-needed employment in construction and related industries.

E. Physical Infrastructure

The quality of Ontario's physical infrastructure has a significant impact on productivity, on private investment decisions, and thus on the economy's capacity to generate high-quality, well-paying, secure jobs. It influences not only the capacity to attract new economic development but also the vitality of our communities, the quality of life and the protection of the environment.

Infrastructure, such as public transit, power generation, and roads and highways, has long been important to economic development. In the 1990s, there will be additional pressures not only to upgrade existing infrastructure but also to respond to the need for new kinds of infrastructure.

Expanded trade with the Great Lakes States has increased the use of road transportation links with the United States, straining the existing highway infrastructure and increasing the need for improvements. These pressures are aggravated by the evolution of just-in-time delivery of inventory which in turn has significantly increased the strategic importance of highways for manufacturers.

The challenges of economic restructuring have brought demands for new types of infrastructure. In an information-based economy, innovations in telecommunications benefit productivity in all parts of the economy, including industrial competitiveness, the environment, and the effective use of energy and transportation infrastructures.

Demographic pressures are also driving the need for infrastructure investment. The Greater Toronto Area has accommodated half the province's population growth in the past decade, which has led to pressures on roads, transit, water, sewer and solid waste systems.

Communities need to upgrade existing infrastructure facilities to attract new economic development and to create new job opportunities. Investments in education, training and child care facilities build the productive potential of our society. Child care facilities and services, for example, enable many parents to take advantage of educational, training and employment opportunities.

Concern about the natural environment is leading to new pressures, as well as the need to ensure that capital investment policies are consistent with the principles of sustainable development. Energy and water conservation are essential to avoid unnecessary expansion of electric power, water and

sewer systems. Improved public transit will be necessary to forestall increasing pressure on the road network, as well as to moderate the environmental impact of the automobile.

Physical infrastructure investment as a per cent of Gross Domestic Product (GDP) has been declining almost steadily since the 1960s in Ontario and the rest of Canada. This decline was only recently reversed. In 1991, public capital investment rose to offset the effects of the recession. In the 1992 Ontario Budget, further steps are outlined to underscore the Province's commitment to putting in place the infrastructure Ontario requires for an advanced, globally competitive economy. This year, the Province will invest $3.9 billion in capital renewal.

Strategic Infrastructure Investment

The Government recognizes that public capital investment should be based on strategic considerations that support economic restructuring and better position Ontario to prosper in the 21st century.

The JOBS ONTARIO Capital Fund is a strategic capital renewal program that will invest $2.3 billion over the next five years. In 1992-93, $500 million will be allocated to the new program resulting in nearly 10,000 direct and indirect jobs.

Priority will be given to projects that create jobs and support long-term economic growth. Prime candidates for projects include:

- telecommunications projects that provide the basis for future business growth;
- environmental projects that ensure clean beaches and safe drinking water;
- new investments to support state-of-the-art upgrades and expansion of public transit;
- major highways essential to reach export markets and facilitate just-in-time delivery;
- construction of new child care spaces to support the JOBS ONTARIO Training Fund.

The Government will also address the need for a more comprehensive and integrated approach to public sector capital investment in Ontario. This includes a review of funding arrangements and delivery roles, streamlined approvals processes and consideration of new ways to finance major capital investments.

F. Technology

Technology transfer and development is a complex process that requires access to a range of skills and services. Many firms do not have the necessary resources in-house. Most firms benefit from a supporting technological infrastructure, including universities and community colleges, government and private R&D laboratories, and high-tech industry associations. Technological infrastructure is a critical determinant of both R&D levels and the ultimate impact of investments in technology. Firms that have worked with government labs and universities in collaborative R&D efforts overwhelmingly report positive results.[18]

Recent surveys suggest that Canadian firms are increasingly committed to R&D. In its 1992 R&D Outlook, the Conference Board of Canada reported that, in spite of an economic slowdown, R&D expenditures grew by an average of 5.3 per cent in the 1991-1992 period. Projected growth over the medium term of 5.4 per cent is well above the expected rate of inflation.

The Government has also undertaken a number of steps to directly support R&D and technology efforts:

- The R&D Super Allowance provides tax-based support for firms investing in R&D in Ontario.
- Provincial assistance for the establishment of the Industrial Research and Development Institute, in conjunction with the private sector and academic community, facilitates a unique opportunity to build competitive advantages based on applied research and technology development.
- Ontario support for projects by Devtek Corporation and ORTECH International and General Electric Canada levers new private investment and encourages innovation.
- The Government is renewing the Centres of Excellence for a second five-year term. The seven Centres of Excellence bring together university researchers and private firms to undertake joint research in emerging sectors such as telecommunications, lasers, space research, computers and materials.
- The Technology Fund, through a number of specific programs, supports innovative projects and cross-sectoral collaboration.
- Ontario is providing funding support for a recent bid by a group of academic and research organizations to attract the International Space University to the province.

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18 Survey conducted by the Canadian Research Management Association whose members perform 70 per cent of Canadian R&D.

- The Government is also working with business, labour and community-based interests to help shape the future of telecommunications in Ontario. An advisory committee will help to develop a strategic action plan.

G. Financial System

Investment in technology, restructuring, human resources and organizational changes requires access to financial capital. A well-developed financial system is essential. Ontario is the major centre of finance in Canada and headquarters to many of Canada's leading financial institutions, thus providing a substantial advantage. Major financial institutions are adept at financing major projects, particularly those related to Ontario's industrial, resource and development industry strengths.

However, several reports sponsored by the private sector and the federal government have suggested that smaller or innovation-based enterprises may not receive sufficient investment capital. [19] In addition, a focus on short-term profits may have led to the neglect of potential long-term investment opportunities.

In the 1991 Budget, the Government made a commitment to explore new ways to finance economic restructuring. Over the past year, the Government has taken concrete action. The Government introduced the Ontario Investment and Worker Ownership Program. This program provides tax credits to encourage worker ownership and help workers invest in the Ontario economy. Nearly $40 million has been invested through the program to date. Since its inception, this initiative has helped support worker investments in the Spruce Falls Power Company Ltd., protecting jobs in the community. The 1992 Ontario Budget expands the maximum allowable investment under the Labour-Sponsored Venture Capital Corporation program to $5,000 and maximum firm size to $50 million in assets. This program provides new opportunities for working people to invest in the Province's economic future.

This spring, the Government announced its intention to establish an Ontario Investment Fund and released a public discussion paper. The Fund will provide much-needed investment capital to those businesses that are increasingly important to the Province's future prosperity – in high technology fields and in more innovative and knowledge-based types of production. The Fund will act as a financial intermediary between these important industries and long-term capital. Investments will be geared

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19 The Canadian Chamber of Commerce, *Focus 2000: report of the Task Force on Making Investment Capital Available*, August 1988 and National Advisory Board on Science and Technology, *Committee on the Financing of Industrial Innovation*, November, 1990.

towards earning a competitive rate of return. The Government will be pursuing extensive consultations on this proposal.[20]

Ontario's Financial Services Sector: A Source of Competitive Strength

Ontario is Canada's centre for financial services activity. The financial services sector is a major source of economic activity and stability in Ontario, generating over 200,000 jobs and one-sixth of provincial output.

The financial sector comprises the banking, trust and loans, insurance, credit unions and co-operatives, securities, mutual fund and pension industries. Ontario is home to:

- Over $200 billion of bank assets;
- 70 per cent of Canadian Schedule I and II banks;
- Nearly 60 per cent of all Canadian trust company assets and liabilities;
- The largest insurance marketplace in Canada accounting for 42 per cent of life insurance and 51 per cent of property and casualty insurance premiums;
- The Toronto Stock Exchange (TSE) – Canada's major stock exchange and largest equity market. In 1991, trading value on the TSE totalled $67.7 billion or 75.2 per cent of all dollar trading across Canadian exchanges.

Ontario's financial services sector, which is concentrated in Toronto, has been identified as one of the ten largest strategic industrial clusters in Canada by a recent study commissioned by Kodak Canada Inc. This cluster includes the five largest Schedule I banks and the two largest trust companies in Canada.

H. The Environment

The need to ensure that growth and associated economic activities are sustainable is now widely recognized. Protection and restoration of the environment is essential to future prosperity, in terms of human health and quality of life as well as the continuing availability of resources and environmental inputs to the economy.

In recognition of the fundamental importance of the ecological system, the Government has announced support for an Environmental Bill of Rights, and is currently consulting with the business and environmental communities. Draft legislation will be released later this year. In addition, Ontario Hydro has launched a major campaign to promote energy

20 Government of Ontario, *The Ontario Investment Fund: A Discussion Paper*, April 1992.

efficiency. By conserving energy, Ontario Hydro will be able to defer the construction of costly new generating capacity, thus reducing energy costs for consumers and businesses and making fewer demands on our environment.

Ontario's environment and natural resources provide a source of comparative advantage. By adopting more advanced environmental approaches — to products, production, worker and community relations– traditional businesses can improve their competitive positions. This has been the experience of several important German and Japanese companies. Indeed, both of these countries have focused on innovation, taking advantage of stringent environmental standards, as a source of economic strength.

Green industries are the "good news" result of recognizing the role of the environment in economic restructuring – the new products that improve the quality of the environment. By taking the lead in developing ways of protecting and cleaning up the environment and using our resources more efficiently, Ontario industries have the opportunity to develop new markets based on the rapidly growing global demand for green goods and services.

Boosting Ontario's presence in the market for green products, improving environmental protection technology and enhancing pollution prevention approaches are priorities.

Green industries contribute to equitable structural change by providing jobs that produce goods and services with higher value-added than the current average. The promotion of green industries also represents an investment in capacity that will produce output for the future needs of the economy. The green goods and services that help protect the environment are clearly going to be among the fastest growing sectors in the foreseeable future.

The Government intends to streamline environmental regulatory processes, thereby providing greater certainty for investors. Green industries are good for both the economy and the environment.

Conclusion

Ontario faces basic changes in the way its economy operates. New technology and changing trade conditions are reshaping the bases of international comparative advantage. Ontario's standard of living and public services depend on the ability to respond flexibly and positively to these new and changing conditions.

Investment in people, infrastructure, technology and equipment is essential to raising productivity and incomes in Ontario. A framework has been set out that recognizes the Government's capacity to promote investment and economic renewal through its actions in eight key areas: macroeconomic and regulatory policies, firm organization and sectoral strategies, labour market policy, social infrastructure, physical infrastructure, technology, the financial system and the environment.

Partnerships are critically necessary. Labour, business and governments have not always been traditional allies in Ontario, reflecting historical differences in objectives. Yet common goals for wealth creation, greater equity and improved international economic standing far outweigh any divergence in short-term interests. Building successful linkages between economic partners remains a critical element of the government's approach to investment and growth.

Improved economic efficiency and greater social and economic fairness are complementary objectives. It is unacceptable that the risks and costs of structural change be borne by one group in society, while benefits are garnered by another. Workers and small businesses are particularly vulnerable to the costs of this transition. The Government believes that adaptation to change requires an equitable sharing of costs and benefits. In turn, greater equity and improved security will encourage individuals and groups throughout the economy to make necessary transitions, further raising economic potential. The Government's economic strategy for improving wealth-creating capacity depends on bringing new groups and individuals into the economic mainstream of Ontario society.

The 1992 Ontario Budget announces several new initiatives that are an effective down-payment on a new strategic approach to promoting economic renewal, including the JOBS ONTARIO Training Fund and the JOBS ONTARIO Capital Fund, support for sectoral partnerships, reforms to the regulatory system and tax cuts to support manufacturing, resource industries and research and development.